

NOMINAL LUMENS	DELIVERED LUMENS	WATTAGE
9000	9400	75W
7500	7754	70W
6000	5877	60W
5000	5213	52W
4000	3795	36W

Based on 4000K, 85+ CRI. Actual wattage may vary +/- 5%

FEATURES

This fully luminous edge-lit LED flat panel delivers exceptional performance and aesthetically pleasing optics, optimizing shallow plenum spaces. Perfect for new construction applications or retrofitting existing fluorescent troffer luminaires. It offers a range of dimming, lumen and CCT options. Perfect for either recessed or surface mounted installations, it's an ideal choice for commercial office space, retail merchandising, educational, and healthcare facilities.

LUMENS	4000, 5000, 6000, 7500
CCT	30K, 35K, 40K, 50K
CRI	85+
UGR	<19
COLOR QUALITY	3 Step MacAdam Ellipse
SIZE	2'x4', 2'x2', 1'x4'
MOUNTING	Recessed, Suspended, Surface Mount
DIMMING & CONTROL	0-10V Flicker Free 1% Dimming Standard (DIM10)
EMERGENCY	10W - Up to 1000L output (Bodine BSL310) 20W - Up to 2000L output (Bodine BSL20)
LIFETIME	L70 at 60,000 Hours
PHOTOMETRIC TESTS	In Accordance with IES LM79-08, LM80 and TM-30, TM-21



MAINTENANCE

The driver is removable and upgradable even after luminaire installation. Luminaire can be regularly and safely wiped down to ensure optimal performance.

OPTICAL SYSTEM

The proprietary optical system utilizes a unique combination of reflective and refractive optical components to achieve an edge-lit, uniform, and aesthetically pleasing appearance. Use of a light guide plate creates even, glare-free illumination, while maintaining high efficiency.

CONSTRUCTION

Heavy duty 20-gauge cold rolled steel back panel and aluminum frame, post-painted and engineered for maximum strength and extended life. All corners interlock to prevent aesthetic damage to the luminaire, with sides and corners uniformly turned in and hemmed to remove sharp edges for safe handling and easy installation. Luminaire is supplied with multiple wiring entrances for easy daisy chain of luminaires, to add power packs, whips, or other accessories in the field, or for continuous row mounting.

FINISH

Post-painted with a 93% reflective white coat to improve luminaire efficacy, with all body components seamlessly interlocked for added structural strength.

MOUNTING

Luminaires accommodate lay-in ceilings, Slot T, and T-bar suspension systems for 5/8" and 3/8" ceiling thicknesses. Four corner tie points are standard for safety wire support when required, with built-in earthquake clips, standard. Luminaires may be available with flange kits, surface mounted kits, and other options. SMK required if suspending the fixture.

OPTIONS

Luminaires can be shipped pre-installed with whips, modular wiring systems

DRIVER ELECTRICAL INFORMATION

Powered by high-quality constant-current power LED drivers which are rated for 50 to 60Hz at 120/277V input. Available in 347V., produce less than 20% THD, and have a power factor of .90 to 1.00.

DIMMING & DRIVER INFORMATION

DIM10 - Flicker Free 1% Dimming Standard (DIM10) 0-10V dimming

WARRANTY

Five-year warranty for parts and components. (Labor not included)

LISTINGS

c-UL-us - Listed for Feed Through Wiring.
Listed for DLC.
Can be used to comply with Title 24, non residential listing requirements.

Example: 24-FPL1-LED-5000L-DIM10-MVOLT-30K-85

24	FPL1	LED							
FIXTURE SIZE	SERIES	TYPE	LUMENS	DIMMING	VOLTAGE	CCT	CRI	EMERGENCY	OTHER OPTIONS
24 - 2' X 4'	FPL1 - Edge-lit LED Flat Panel	LED	4000L- 4000 lumens 5000L- 5000 lumens 6000L- 6000 lumens 7500L- 7500 lumens	DIM10 - 0-10V Dimming	MVOLT	30K 35K 40K 50K	85	0-EMG-LED-10W 0-EMG-LED-20W	24FK - 2'x4' Flange Kit 24-FPL1-LED-SMK - 2'x4' Surface Mount Kit FBF - Internal Slow Blow Fuse SBF - Radio Interference RIS - Suppressor USA - Made in America Compliance LMFC-011 - Digital Lighting Manager

24-FPL1-LED-4000L-DIM10-MVOLT-40K-85

TEST NO.: **EL101863**

INPUT WATTS: **36**

LUMENS: **3795**

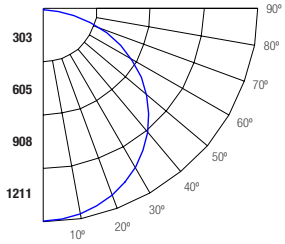
CRI: **85**

EFFICACY: **105**

CCT: **4000K**

SPACING CRITERIA: **1.42**

Candle Power Distribution (Candelas)



Zonal Lumens Summary

Zone	Lumens	%Lamp	%Fixt
0-20	444.62	11.70	11.70
0-30	950.51	25.10	25.00
0-40	1571.44	41.50	41.40
0-60	2854.83	75.30	75.20
0-80	3652.48	96.40	96.20
0-90	3759.77	99.20	99.10

Luminance (Average candela/M²)

Angle in Degrees	Average 0°	Average 45°	Average 90°
45	1600	1633	1654
55	1581	1626	1651
65	1528	1592	1627
75	1433	1537	1580
85	1324	1544	1623

Lumens Per Zone

Zone	Lumens
0-10	114.65
10-20	329.97
20-30	505.90
30-40	620.93
40-50	663.75
50-60	619.65
60-70	492.43
70-80	305.22
80-90	107.30

Candela Tabulation

0	
0	1210.666
5	1203.610
15	1163.620
25	1089.950
35	981.840
45	841.590
55	674.580
65	480.470
75	275.860
85	85.840
90	16.110

Coefficients of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance 0.20

ROOM CAVITY RATIO	RC RW	80%				70%				50%			30%			10%			0%
		70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	101	101	101	99	
1	108	103	98	94	105	100	96	93	96	93	89	92	89	87	88	86	84	82	
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	69	67	
3	89	78	69	62	86	76	68	62	73	66	61	70	64	59	67	62	58	56	
4	81	69	60	53	79	67	59	52	65	57	51	62	56	50	60	54	50	47	
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41	
6	69	55	46	39	67	54	45	39	52	44	38	50	43	38	48	42	38	35	
7	64	50	41	34	62	49	40	34	47	39	34	46	39	34	44	38	33	31	
8	59	45	37	31	57	45	36	30	43	36	30	42	35	30	40	34	30	28	
9	55	41	33	27	54	41	33	27	40	32	27	38	32	27	37	31	27	25	
10	52	38	30	25	50	38	30	25	37	29	25	36	29	24	35	29	24	22	

RC - Ceiling Cavity Reflectance RW - Wall Reflectance

24-FPL1-LED-5000L-DIM10-MVOLT-40K-85

TEST NO.: **EL101861**

INPUT WATTS: **52.6**

LUMENS: **5213**

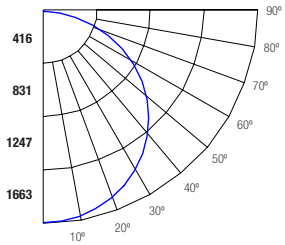
CRI: **85**

EFFICACY: **99**

CCT: **4000K**

SPACING CRITERIA: **1.42**

Candle Power Distribution (Candelas)



Zonal Lumens Summary

Zone	Lumens	%Lamp	%Fixt
0-20	610.86	11.70	11.70
0-30	1306.05	25.10	25.10
0-40	2159.53	41.50	41.40
0-60	3914.74	75.20	75.10
0-80	5014.9	96.30	96.20
0-90	5164.68	99.20	99.10

Luminance (Average candela/M²)

Angle in Degrees	Average 0°	Average 45°	Average 90°
45	2250	2213	2204
55	2239	2191	2179
65	2190	2124	2111
75	2108	1989	1975
85	2068	1865	1835

Lumens Per Zone

Zone	Lumens
0-10	157.47
10-20	453.39
20-30	695.19
30-40	853.49
40-50	907.32
50-60	847.89
60-70	678.89
70-80	421.27
80-90	149.78

Candela Tabulation

0	
0	1662.749
5	1656.500
15	1607.220
25	1511.290
35	1369.590
45	1183.350
55	955.240
65	688.460
75	405.820
85	134.060
90	28.290

Coefficients of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance 0.20

ROOM CAVITY RATIO	RC RW	80%				70%				50%			30%			10%			0%
		70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	101	101	101	99	
1	108	103	98	94	105	100	96	92	96	93	89	92	89	86	88	86	84	81	
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	69	67	
3	89	78	69	62	86	76	68	62	73	66	61	70	64	59	67	62	58	56	
4	81	69	60	53	79	67	59	52	65	57	51	62	56	50	60	54	50	47	
5	74	61	52	45	72	60	51	45	58	50	44	56	49	43	54	48	43	41	
6	69	55	46	39	67	54	45	39	52	44	38	50	43	38	48	42	38	35	
7	64	50	41	34	62	49	40	34	47	39	34	46	39	34	44	38	33	31	
8	59	45	37	31	57	44	36	30	43	36	30	42	35	30	40	34	30	28	
9	55	41	33	27	54	41	33	27	40	32	27	38	32	27	37	31	27	25	
10	52	38	30	25	50	38	30	25	37	29	25	36	29	24	35	29	24	22	

RC - Ceiling Cavity Reflectance RW - Wall Reflectance

24-FPL1-LED-6000L-DIM10-MVOLT-35K-85

TEST NO.: **EL07221986**

INPUT WATTS: **60**

LUMENS: **5877**

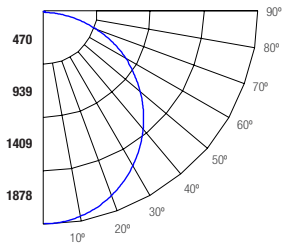
CRI: **85**

EFFICACY: **118**

CCT: **3500K**

SPACING CRITERIA: **1.42**

Candle Power Distribution (Candelas)



Zonal Lumens Summary

Zone	Lumens	%Lamp	%Fixt
0-20	688.19	11.70	11.70
0-30	1470.75	25.00	25.00
0-40	2431.07	41.40	41.40
0-60	4406.98	75.00	75.00
0-80	5654.17	96.20	96.20
0-90	5824.5	99.10	99.10

Luminance (Average candela/M²)

Angle in Degrees	Average 0°	Average 45°	Average 90°
45	2477	2509	2550
55	2454	2496	2547
65	2385	2442	2509
75	2224	2300	2402
85	2105	2266	2451

Lumens Per Zone

Zone	Lumens
0-10	177.42
10-20	510.77
20-30	782.56
30-40	960.32
40-50	1021.4
50-60	954.50
60-70	768.45
70-80	478.74
80-90	170.33

Candela Tabulation

0	
0.0	1873.486
5.0	1865.940
15.0	1803.960
25.0	1685.490
35.0	1517.590
45.0	1302.840
55.0	1047.190
65.0	749.680
75.0	428.270
85.0	136.500
90.0	32.060

Coefficients of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance 0.20

ROOM CAVITY RATIO	RC RW	80%				70%				50%			30%			10%			0%
		70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	101	101	101	99	
1	108	103	98	94	105	100	96	92	96	92	89	92	89	86	88	86	84	81	
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	76	73	69	67	
3	89	78	69	62	86	76	68	62	73	66	60	70	64	59	67	62	58	56	
4	81	68	59	52	79	67	59	52	64	57	51	62	56	50	60	54	50	47	
5	74	61	52	45	72	60	51	45	58	50	44	55	49	43	53	48	43	41	
6	68	55	46	39	66	54	45	39	52	44	38	50	43	38	48	42	37	35	
7	63	50	41	34	62	49	40	34	47	39	34	45	39	33	44	38	33	31	
8	59	45	36	30	57	44	36	30	43	36	30	42	35	30	40	34	30	28	
9	55	41	33	27	54	41	33	27	40	32	27	38	32	27	37	31	27	25	
10	52	38	30	25	50	38	30	25	37	29	24	35	29	24	35	29	24	22	

RC - Ceiling Cavity Reflectance RW - Wall Reflectance

24-FPL1-LED-7500L-DIM10-MVOLT-50K-85

TEST NO.: **EL08191997**

INPUT WATTS: **70.1882**

LUMENS: **7754**

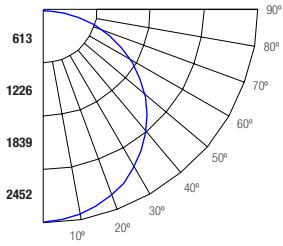
CRI: **85**

EFFICACY: **110**

CCT: **5000K**

SPACING CRITERIA: **1.42**

Candle Power Distribution (Candelas)



Zonal Lumens Summary

Zone	Lumens	%Lamp	%Fixt
0-20	897.72	11.60	11.60
0-30	1920.56	24.80	24.80
0-40	3176.67	41.00	41.00
0-60	5763.95	74.40	74.30
0-80	7424.07	95.90	95.70
0-90	7675.56	99.10	99.00

Luminance (Average candela/M²)

Angle in Degrees	Average 0°	Average 45°	Average 90°
45	3241	3280	3299
55	3210	3269	3293
65	3151	3235	3268
75	3060	3191	3233
85	3376	3624	3640

Lumens Per Zone

Zone	Lumens
0-10	231.28
10-20	666.44
20-30	1022.84
30-40	1256.11
40-50	1336.96
50-60	1250.32
60-70	1008.62
70-80	651.51
80-90	251.48

Candela Tabulation

0	
0	2441.382
5	2419.520
15	2343.070
25	2196.300
35	1980.490
45	1704.750
55	1369.800
65	990.670
75	589.240
85	218.870
90	59.000

Coefficients of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance 0.20








RC RW	80%				70%				50%			30%			10%			0%
	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	101	101	101	99
1	108	103	98	94	105	100	96	92	96	92	89	91	89	86	88	85	83	81
2	97	89	81	75	95	87	80	74	83	77	72	79	75	71	76	72	69	67
3	89	77	69	62	86	76	68	61	73	66	60	70	64	59	67	62	58	55
4	81	68	59	52	78	67	58	52	64	57	51	62	55	50	59	54	49	47
5	74	61	51	45	72	60	51	44	57	50	44	55	48	43	53	47	43	40
6	68	55	45	39	66	54	45	39	52	44	38	50	43	38	48	42	37	35
7	63	49	40	34	61	49	40	34	47	39	34	45	38	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	41	35	30	40	34	29	27
9	55	41	33	27	53	41	33	27	39	32	27	38	31	27	37	31	26	25
10	52	38	30	25	50	37	30	24	36	29	24	35	29	24	34	28	24	22

RC - Ceiling Cavity Reflectance

RW - Wall Reflectance

2' x 4' Architectural LED Flat Panel with multiple lumen package

- 1- Luminaire will be shipped with Powerpacks pre-installed, ready to be integrated to designated control systems
- 2- Luminaire will be shipped with Sensors installed on the luminaire, allowing for individual luminaire control. Luminaires will be ready to be integrated with designated control systems
- 3- Luminaire will be shipped with Sensors to be remotely installed on the ceiling. Luminaires will be ready to be integrated with designated control systems

BRAND	 EASYFIT <small>by EnOcean</small>	 LUTRON	 enlighted	 LEVITON	 OSRAM	 PHILIPS <small>EasySense</small>	 legrand
CONTROL UNIT	<input type="checkbox"/> LEDRU LED Relay Zone Controller 0-10V ¹ <input type="checkbox"/> LEDDU LED Zone Controller 0-10V ¹	<input type="checkbox"/> FCJS-010 Lutron Vive 0-10V Individual Pow Pak (Luminare is shipped Vive Enabled) ¹⁴ <input type="checkbox"/> FCJS-ECO Lutron Vive Eco-system Pow Pak (Luminare is shipped Vive Enabled) ¹⁴	<input type="checkbox"/> CU-4E-FMH Fixture Mount Control Unit ¹⁵	<input type="checkbox"/> ZL027 -NOW Intellect Power Control Module ¹⁶ <input type="checkbox"/> ZL027 -NOW Intellect Power Control Module ¹⁶	<input type="checkbox"/> EN-WCM2-ZB-DR Wireless Control Module ¹⁷ <input type="checkbox"/> EN- ALC-ZB-BK-DR Wireless Area Lighting Control Module ¹⁷ <input type="checkbox"/> ZBHA-CLM-DIM-ENC Connected Lighting Module DIM ¹⁷	<input type="checkbox"/> SBR -BS Xitanium SR Bridge ¹⁸	<input type="checkbox"/> LMFC-011 ON/OFF/0-10V dimming fixture controller ¹⁹
INTEGRAT SENSOR	N/A	N/A	N/A	N/A	N/A	N/A	N/A
*WIRELESS OCCUPANCY SENSOR	<input type="checkbox"/> EOSCU-W-E0 Occupancy Sensor - Ceiling Mounted (Must be specified with LEDRU or LEDDU control unit) ³	N/A	N/A	N/A	N/A	N/A	<input type="checkbox"/> LMDC-100 Dual technology PIR Ceiling Mount Occupancy Sensor ³
*WIRELESS DAYLIGHT SENSOR	<input type="checkbox"/> ELLSU-W-E0 Light Level Sensor - Ceiling Mounted (Must be specified with LEDRU or LEDDU control unit) ³	N/A	N/A	N/A	N/A	N/A	<input type="checkbox"/> LMLS-400 Single zone switching and dimming digital photosensor ³
*WIRELESS OCCUPANCY & DAYLIGHT SENSOR	N/A	N/A	<input type="checkbox"/> SU-5E-IoT IoT Node Micro Sensor ³ <input type="checkbox"/> SU-5E-CL Connected Lighting Micro Sensor ³ <input type="checkbox"/> SU-5E-IL Independent Lighting / Enlighted One Micro Sensor ³ <input type="checkbox"/> SU-5S-H-(IoT/CL/IL) Surface Mount Sensor ³ (Must be specified with CU-4E-FMH Control Unit)	<input type="checkbox"/> ZL00J -TOW Intellect Intelligent Fixture Control System ³ (Must be specified with ZL027 -NOW Control Unit)	<input type="checkbox"/> EN-CLM-PIR-DD-ZB SensiLUM™ Wireless Integrated Sensor <input type="checkbox"/> EN-SCPPH-1500-ZB Wireless Passive Infrared Occupancy and Photo Sensors ³ (Must be specified with EN-WCM2-ZB-DR or EN-ALC-ZB-BK-DR Control Unit)	<input type="checkbox"/> SNS200-CMP SNS200 for grouping ³	N/A
ACCESORIES	N/A	N/A	<input type="checkbox"/> TMC-SU-5E Tile Mount Carrier <input type="checkbox"/> CBL-5E-CU4-30N 30 inch Sensor Cable for CU-4 and IoT Ready™ drivers <input type="checkbox"/> CBL-5E-CU4-7F 7 foot Sensor Cable for CU-4 and IoT Ready™ drivers	N/A	N/A	N/A	N/A
NOTES	N/A	4- Luminaire will be compatible with Lutron LRF2-OCR2B-P-WH Ceiling mount 360° occupancy/vacancy sensor & LRF2-DCRB-WH Ceiling-mount daylight sensor. Sensors must be ordered through Lutron.	5- Luminaire will be compatible with ENLIGHTED SU-5E-IoT, SU-5E-CL, SU-5E-IL, SU-5S-H, Sensors.	6-Luminaire will be compatible with Leviton Intellect App & Keypad Room Controller	7-Luminaire will be compatible with EN-SCPPH-1500-ZB Wireless Passive Infrared Occupancy and Photo Sensors	8-Luminaire will be compatible with Philips field and wireless switch.	9-Luminaire will be compatible with DLM Room control system LMPB-100. DLM control system must be order through Legrand.